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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,891	12/22/2005	Volodymur M Voloshyn	VOLO100001000	5913
	7590 08/06/200 OF DELIO & PETERS	EXAMINER		
121 WHITNEY AVENUE 3RD FLLOR NEW HAVEN, CT 06510			MATTHEWS, TERRELL HOWARD	
			ART UNIT	PAPER NUMBER
			3653	
			MAIL DATE	DELIVERY MODE
			08/06/2008	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/561,891	VOLOSHYN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Terrell H. Matthews	3653			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>28 Mar</u> This action is <b>FINAL</b> . 2b) ☑ This      Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) Claim(s) 1-7 is/are pending in the application.  4a) Of the above claim(s) 6 and 7 is/are withdra  5) Claim(s) is/are allowed.  6) Claim(s) 1 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or  Application Papers  9) The specification is objected to by the Examine.  10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the orecast.	r election requirement. r. epted or b)⊡ objected to by the B drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/19/2006.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	nte			

### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election without traverse of claim 1 in the reply filed on 5/28/2008 is acknowledged.

Claims 2-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 5/28/2008.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, it is unclear as to what is referred to by applicant by the term "valuable constituent" and therefore indefinite. In the interim for purposes of compact prosecution the phrase "valuable constituent" has been interpreted as meaning "any characteristic of the feedstock".

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ulrichsen (US-7262380).

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Referring to claim 1. Ulrichsen discloses the "Determination of Characteristics of Material". See Figs. 1-11 and respective portions of the specification. Ulrichsen further discloses a method of separating feedstock, the method comprising feeding the feedstock lump by lump, exposing the feedstock to microwave radiation, recording induced radiation, detecting a valuable constituent, and separating the lumps into two steams, one stream consisting of a targeted steam while the other is not. Moreover, Ulrichsen further discloses that objects can be sorted by size, density, weight or metal content (See at least Col. 11 I. 50 - Col. 12 I. 15, Col. 17 I. 40-51 & at least Fig. 2). Ulrichsen does not disclose comparing the weight fraction of the valuable constituent with the threshold value of the fraction. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Ulrichsen to compare the weight fraction of the valuable constituent with the threshold value of the fraction so that feedstock of specified weights could be separated into multiple streams consisting of a target and wanted portion and unwanted portions based on size andvalue.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell H. Matthews whose telephone number is (571)272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick H. Mackey/ Supervisory Patent Examiner, Art Unit 3653

THM